

DERWENT-ACC-NO: 1999-153313
DERWENT-WEEK: 200063
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TITLE: Diagnosis, treatment and prevention of diabetes and other
autoimmune
diseases - using antibodies reactive with anti-T-cell receptor
Vbeta antibody

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PATENT-ASSIGNEE: MATOSSIAN-ROGERS A[MATOI]

PRIORITY-DATA: 1998GB-0010676 (May 18, 1998) , 1997GB-0015281
(July 21, 1997)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	
PAGES	MAIN-IPC		
CN 1264426 A	August 23, 2000	N/A	000
C12N 015/09			
WO 9905175 A2	February 4, 1999	E	072
C07K 016/00			
AU 9884517 A	February 16, 1999	N/A	000
C07K 016/00			
EP 998556 A2	May 10, 2000	E	000
C12N 015/09			
BR 9810118 A	August 8, 2000	N/A	000
C07K 016/00			

DESIGNATED-STATES: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ
DE DK EE ES FI G
B GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV
MD MG MK MN MW
MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN
YU ZW AT BE CH
CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT
SD SE SZ UG ZW A
L AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
RO SE SI

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO
APPL-DATE		
CN 1264426A	N/A	1998CN-0807380
July 20, 1998		
WO 9905175A2	N/A	1998WO-GB02151
July 20, 1998		

AU 9884517A	N/A	1998AU-0084517
July 20, 1998		
AU 9884517A	Based on	WO 9905175
N/A		
EP 998556A2	N/A	1998EP-0935160
July 20, 1998		
EP 998556A2	N/A	1998WO-GB02151
July 20, 1998		
EP 998556A2	Based on	WO 9905175
N/A		
BR 9810118A	N/A	1998BR-0010118
July 20, 1998		
BR 9810118A	N/A	1998WO-GB02151
July 20, 1998		
BR 9810118A	Based on	WO 9905175
N/A		

INT-CL (IPC): A61K038/16; A61K039/395 ; C07K014/435 ;
 C07K016/00 ;
 C07K016/42 ; C12N015/09

RELATED-ACC-NO: 1999-073525

ABSTRACTED-PUB-NO: WO 9905175A

BASIC-ABSTRACT: Use as a pharmaceutical or diagnostic reagent of one of the following is new: (a) mono- or poly-clonal antibodies (Ab1), or equivalent ligand, reactive with an anti-TCR (T-cell receptor) V beta antibody (Ab2); (b) (oligo- or poly-)peptide or protein (I), bound to Ab1, or its equivalent ligand, that is not Ab2; (c) genomic DNA, cDNA or RNA (II) encoding Ab1, equivalent ligand or (I); (d) bacteriophage clone, plasmid or viral vector containing (II), designated (IIa), that encodes the ESRP1 protein (endocrine secretion regulatory protein). Also new are (1) any (I), designated (Ia), containing the ESRP1 sequence (of 410 amino acids, given in the specification); (2) any nucleic acid (IIa) encoding ESRP1; (3) bacteriophage clone, plasmid or viral vector containing (IIa); (4) host cells stably transfected or transformed with a plasmid or vector of (3).

USE - Ab1, (I) or (Ia) are used to treat or prevent (non-)insulin-dependent diabetes mellitus, (non-)organ-specific autoimmune diseases,

cardiovascular diseases, cachexia, cancer and generally any condition associated with anti-phospholipid (PL) antibodies, hyperinsulinaemia and insulin resistance. Ab1, and equivalent ligands, are also used to detect and quantify natural autoantibodies (Ab3) in blood, plasma and serum, for determining susceptibility to autoimmune disease and for prognosis of disease or treatment efficiency. The method is based on the idea that Ab3 are responsible for autoimmune diseases, e.g. in the case of diabetes they bind to proteins on alpha -cells, resulting in dysregulation of insulin secretion and then beta -cell death.

CHOSEN-DRAWING: Dwg.0/7

TITLE-TERMS:

DIAGNOSE TREAT PREVENT DIABETES DISEASE ANTIBODY REACT ANTI CELL RECEPTOR ANTIBODY

DERWENT-CLASS: B04 D16 S03

CPI-CODES: B04-B04D4; B04-B04D5; B04-E02; B04-E03; B04-E08; B04-F0100E; B04-F1100E; B04-G01; B04-G21; B04-G22; B04-H01; B04-N04; B11-C07A; B12-K04A; B14-E11; B14-F01; B14-F02; B14-G02D; B14-H01; B14-S04; D05-H09; D05-H10; D05-H11; D05-H12A; D05-H12E; D05-H14; D05-H17A2;

CHEMICAL-CODES:

Chemical Indexing M1 *01*

Fragmentation Code

M423 M710 M903 P433 P520 P522 P631 P633 P816 P831

Q233 V600 V611

Chemical Indexing M1 *02*

Fragmentation Code

M423 M710 M903 P433 P520 P522 P631 P633 P816 Q233

V752 V901 V902

Chemical Indexing M1 *03*

Fragmentation Code

M423 M710 M903 Q233 V753

Chemical Indexing M1 *04*

Fragmentation Code

M423 M710 M903 N135 Q233 V500 V540 V560 V754

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C1999-045200

RESULT 1

X22754

ID X22754 standard; DNA; 1231 BP.

XX

AC X22754;

XX

DT 07-JUN-1999 (first entry)

XX

DE Human ESRP1 DNA.

XX

KW ESRP1; treatment; prevention; non-insulin-dependent diabetes mellitus;
KW non-organ-specific autoimmune disease; cardiovascular disease; cancer;
KW cachexia; anti-phospholipid antibody; hyperinsulinaemia; T-cell receptor;
KW insulin resistance; monoclonal; polyclonal; anti-TCR; V beta antibody;
KW detection; autoantibody; blood; plasma; serum; autoimmune disease; human;
KW alpha-cell; dysregulation; insulin secretion; beta-cell death; ss.

XX

OS Homo sapiens.

XX

FH Key Location/Qualifiers

FT CDS 1..1231

FT /*tag= a

FT /product= "ESRP1"

FT /partial

FT /codon_start= 2

XX

PN WO9905175-A2.

XX

PD 04-FEB-1999.

XX

PF 20-JUL-1998; 98WO-GB02151.

XX

PR 18-MAY-1998; 98GB-0010676.

PR 21-JUL-1997; 97GB-0015281.

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PA (MATO/) MATOSSIAN-ROGERS A.

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PI Matossian-Rogers A;

XX

DR WPI; 1999-153313/13.

DR P-PSDB; W93254.

XX

PT Diagnosis, treatment and prevention of diabetes and other autoimmune
PT diseases - using antibodies reactive with anti-T-cell receptor Vbeta
PT antibody

XX

PS Disclosure; Fig 6; 72pp; English.

XX

CC This sequence encodes the human ESRP1 protein. This protein or
CC antibody fragments generated from it are used to treat or prevent
CC (non-)insulin-dependent diabetes mellitus, (non-)organ-specific
CC autoimmune diseases, cardiovascular diseases, cachexia, cancer and
CC generally any condition associated with anti-phospholipid antibodies,
CC hyperinsulinaemia and insulin resistance. Mono- or poly-clonal antibodies
CC and equivalent ligands reactive with an anti-TCR (T-cell receptor) V beta
CC antibody are also used to detect and quantify natural autoantibodies in
CC blood, plasma and serum, for determining susceptibility to autoimmune

CC disease and for prognosis of disease or treatment efficiency. The method
CC is based on the idea that autoantibodies are responsible for autoimmune
CC diseases, e.g. in the case of diabetes they bind to proteins on
CC alpha-cells, resulting in dysregulation of insulin secretion and then
CC beta-cell death.

XX

SQ Sequence 1231 BP; 287 A; 388 C; 362 G; 194 T; 0 other;

Query Match 41.2%; Score 1088.8; DB 20; Length 1231;
Best Local Similarity 94.9%; Pred. No. 1.4e-224;
Matches 1198; Conservative 0; Mismatches 12; Indels 52; Gaps 5;

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